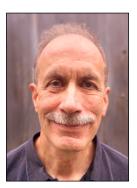


FALL 2023

PHYS 1210University Physics I

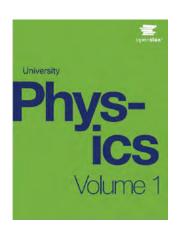


Professor: Dr. Malcolm Butler

PHYS 1210 (University Physics I) is a course for students who have taken grade 12 physics or PHYS 1190 at SMU. There are many resources to help you succeed in this course, and the primary one is the course Brightspace page. This page has all the information and links you will need, and it will be available to registered students during the week before classes begin. I will show you how to use the site on the first day of class. The other course resources are listed here and the Brightspace page will give other sites that might be helpful if you have questions.

Textbook

We will be using an online textbook called *University Physics Volume I* by Moebs, Ling, and Sanny. You can



find it here: openstax.
org/details/books/
university-physicsvolume-1

You can download a free PDF of the textbook, view it in a browser, or purchase a paper copy if you wish. We will cover material from chapters 1-10 and 13 during PHYS 1210; you can start reading chapter 1 now, before classes begin. The course syllabus will give details on the specific sections we will cover.

Quizzes and Homework

The quizzes and homework for our class will be done through the Brightspace platform. Each week, you will be expected to read the assigned sections of the textbook **BEFORE that week's classes begin**. There will be either a quiz or homework; these will make up your homework grade. There will also be a quiz at the start and the end of the course to evaluate your understanding of fundamental topics. You can start by reading chapter 1 right away

Course Structure

Many of the topics in this course were probably part of your high school physics courses. However, the conventions and assumptions used in PHYS 1210 may be very different from what you have seen before. It is very important that you make an effort to fully understand the concepts in depth and not memorize or rely on surface-level understanding. The best ways to do this are completing the readings and other assigned work on time (or early!) and participating during classes.



At different points in the course I will discuss current questions in physics—ones where we don't really have understanding or answers yet. I will open discussion boards for these current questions on Brightspace where, if you wish, you can ask about these current questions and what physicists and collaborators are doing about them.

Calculators

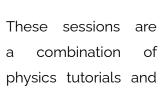
(the same requirements for CHEM 1210)

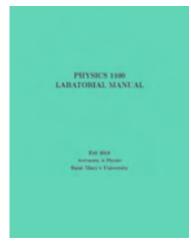


What type of calculator do I need? A scientific non-graphical calculator that is easy to do exponents and y^x functions. The Casio fx-991 or Casio fx-300 work well. Other models are fine as well. You cannot use your cell phone as a calculator!

Lab Manual

As part of PHYS 1210, you will have registered for a weekly 3-hour lab session. These sessions will begin the week of September 18.





laboratory activities (called labatorials), and you will do them in groups that we will assign.

Before you arrive at your first lab, you will need to purchase a PHYS 1210 Laboratory Manual from the SMU Bookstore. You must bring your lab manual with you to every lab session, including the first one, because you will be graded on work that you do in the lab manual.

Download the textbook right away and start reading chapter 1.

See you on the first day of class.

